STRUCTURAL MATERIALS TESTING BRANCH OFFICE OF STRUCTURAL MATERIALS CALIFORNIA DEPARTMENT OF TRANSPORTATION

UPDATED June 02, 2015

THREADED BAR ANCHORAGE SYSTEM AUTHORIZATION SUBMITTAL

Suppliers seeking authorization of ASTM A615, Grade 75 and ASTM A722, Grade 150 bar anchorage systems for inclusion on the California Department of Transportation's (Caltrans) Authorized Materials List must submit a complete Bar System Application. The submittal package (one hard and one electronic copy) should reference a document number and/or revision date and must include all of the items listed below:

1. DESCRIPTION

- a. Current product description and intended application of the proposed system(s). Specific information must include the type of bar material, the proposed ultimate strength of the anchorage system, and information about the proposed tensioning system to be used, when applicable.
- b. Prior history of the system. Include specific details of projects where the system has been used.

2. HARDWARE COMPONENTS

- a. Fully detailed drawings of all components of the system including material specifications for bars, couplers, nuts, bearing plates, and washers.
- b. Material and certifications for all components used for independent system tests. (Certifications should include material composition, strength, and manufacturer.)

3. INDEPENDENT SYSTEM TESTS

a. System must be tensile-tested to failure and meet the bar's minimum specified yield, ultimate tensile strength and percent elongation. Submit test results from the independent testing agency.

Once the submittal is approved by Caltrans, the Supplier will be notified in writing to submit samples for testing.

4. SAMPLES REQUIRED FOR AUTHORIZATION

- a. Six (6) bars, 6 ft. long if diameter is greater or equal to #10, or 4 ft. long if bar diameter is less or equal to #9.
- b. Six (6) nuts if utilized by the system.
- c. Four (4) bearing plates if utilized by the system.
- d. Four (4) washers if utilized by the system.
- e. Four (4) couplers.

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5. TESTING AT THE CALTRANS STRUCTURAL MATERIAL TESTING LABORATORY

a. Samples will be tested to verify compliance with corresponding material designation and may include slip, cyclic, fatigue, percent elongation, yield, ultimate strength, and reduction of area.

Upon satisfactory physical testing, the Supplier will be notified in writing, and the product(s) will be added to the Authorized Material List.